

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 4-13, 60-78 are pending in the application, with claims 1 and 60 being the independent claims. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Claim Rejection Under 35 U.S.C. § 112, ¶1***

The Examiner rejected claims 1, 4-13, and 60-78 under 35 U.S.C. § 112, ¶ 1 as failing to comply with the written description requirement. According to the Examiner:

For claims 1 and 60, applicant [sic] has amended the claims to include the limitation “provided that said biopolymer is not a nucleic acid”. The examine [sic] is unable to find support for this limitaiton in the specification. The specification fails to positively recite nucleic acid biopolymers, and also the biopolymer is described in terms of heparin biopolymers.

*Office Action of October 16, 2003 at page 2* (internal citation omitted).

Applicants amended claims 1 and 60 to remove the limitation reciting “provided that said biopolymer is not a nucleic acid.” This amendment is believed to overcome the Examiner’s failure to comply with the written description requirement rejection.

***Claim Rejections Under 35 U.S.C. § 112, ¶ 2***

The Examiner rejected claims 1, 4-13, and 60-78 under 35 U.S.C. § 112, ¶ 2 as being indefinite. According to the Examiner:

For claims 1, 4-13, and 60-78, applicant [sic] sets forth “[a] coating composition” in the first line of the claims. However, applicant [sic] then sets forth the limitation that the product is coated onto a surface of a substrate. This creates confusion as to what applicant [sic] is claiming.”

*Office Action of October 16, 2003 at pages 2-3.*

Applicants amended claims 1, 4-13, and 60-78 herein to specify “[a] coating” that is the product of the reaction of a specified silane and a biopolymer. Applicants have amended these claims to clarify that the invention encompasses the coating itself. This amendment, removing the limitation “composition,” is believed to overcome the Examiner’s indefiniteness rejection.

***Claim Rejections Under 35 U.S.C. § 102(b)***

The Examiner rejected claims 1, 7, 12, 60, 64, and 69 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,973,680 ("Billmers"). According to the Examiner:

For claims 17, 60, and 64, in column 6, lines 33-66, Billmers teaches that a silane, glycidylxypropyltrimethoxysilane, is reacted with a polysaccharide (biopolymer) containing a hydroxyl group to form a covalently bonded product. In Example 1, columns 12-13, Billmers teaches the synthesis of a silane biopolymer adduct. For claims 1 and 60, in column 7, lines 15-33, Billmers teaches that this material is coated on glass where the silanol group of the hydrolyzed silane reacts with the glass. Billmers does not teach the use of a primer.

For claims 12 and 69, in column 11, lines 58-68, Billmers teaches an additive in the form of a surface-active agent (emulsifier).

*Office Action of April 1, 2003 at pages 3-4.*

Applicants have amended claims 1 and 60 herein by clarifying that the coating product of the reaction between the silane and the biopolymer is “directly coated onto a surface of a medical device,” rather than onto a substrate generally. Support for this amendment may be found at paragraph 0021 of the specification.

Billmers discloses “[o]rganosiloxane-starch derivatives and graft polymers . . . useful in glass forming size compositions.” (Billmers, col. 3, lines 18-20.) The organosiloxane-starch derivatives taught in Billmers “are also useful in paper making. . .,” not as a coating for a medical device. In light of Applicants' amendments to claims 1 and 60, reconsideration and withdrawal of the Examiner's anticipation rejection under 35 U.S.C. § 102(b) in view of Billmers is respectfully requested.

***Dependent Claims***

Dependent claims 7, 12, 64, and 69 are believed allowable for at least the same reasons discussed above for claims 1 and 60.

***Claim Rejections Under 35 U.S.C. § 102(e)***

The Examiner rejected claims 1 and 60 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,048,695 (“Bradley *et al.*”). According to the Examiner:

For claims 1 and 60, in column 5, line 55 through column 6, lines 47, Bradley teaches that an epoxy-containing silane is reacted with a biopolymer (DNA) and that subsequently this product is affixed to an underivatized glass surface. Bradley does not teach any other components added to this product in the Example.

*Office Action of October 16, 2003, at page 4.*

As stated above, Applicants have amended claims 1 and 60 herein by clarifying that the coating product of the reaction between the silane and the biopolymer is “directly coated onto

a surface of a medical device,” rather than onto a substrate generally. Also, as stated above, support for this amendment may be found at paragraph 0021 of the specification.

The invention disclosed in Bradley *et al.* relates “to techniques for immobilizing nucleic acids to a solid support for the purpose of conducting scientific investigation or routine testing upon the bound nucleic acid samples. . . ,” not as a coating for a medical device as claimed in claims 1 and 60. (Bradley *et al.*, col. 1, lines 8-11.) Thus, reconsideration and withdrawal of the Examiner’s anticipation rejection under 35 U.S.C. § 102(e) in view of Bradley *et al.* is respectfully requested.

### ***Conclusion***

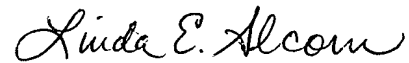
All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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